d his

(FILE 'HOME' ENTERED AT 13:09:36 ON 22 APR 2002)

FILE 'MEDLINE, AGRICOLA, CANCERLIT, SCISEARCH, CAPLUS, BIOSIS, MEDICONF'
ENTERED AT 13:09:45 ON 22 APR 2002

```
L1      756977 S CHROMOSOME?
L2         301 S L1 AND (INTRON? (L) ENDONUCLEASE?)
L3         137 DUP REM L2 (164 DUPLICATES REMOVED)
L4         137 FOCUS L3 1-
L5         153 S L1 AND ((GROUP I INTRON?) OR (INTRON ENCODED))
L6          77 S L5 (L) ENDONUCLEASE?
L7          77 S L5 AND ENDONUCLEASE?
L8          37 DUP REM L7 (40 DUPLICATES REMOVED)
L9          37 SORT L8 PY
L10         37 FOCUS L9 1-
L11          2 S L9 AND MAMMAL?
```

FILE 'STNGUIDE' ENTERED AT 13:25:50 ON 22 APR 2002

FILE 'MEDLINE, AGRICOLA, CANCERLIT, SCISEARCH, CAPLUS, BIOSIS, MEDICONF'
ENTERED AT 13:26:24 ON 22 APR 2002

```
L12        214 S L1 AND (I-SCEI? OR I-CSMI? OR I-PANI? OR I-TEVI? OR I-PPOI?)
L13         82 DUP REM L12 (132 DUPLICATES REMOVED)
L14         82 FOCUS L13 1-
L15         25 S L13 AND MAMMAL?
L16         25 SORT L15 PY
```

=> d an ti so au ab pi l14 1 9 11 12 16

L14 ANSWER 1 OF 82 CAPLUS COPYRIGHT 2002 ACS
AN 1998:545391 CAPLUS
DN 129:172448
TI Cloning and expression of gene for restriction endonuclease **I-SceI** of Saccharomyces cerevisiae and use of **I-SceI**
SO U.S., 79 pp. Cont.-in-part of U. S. 5,474,896.
CODEN: USXXAM
IN Dujon, Bernard; Choulika, Andre; Perrin, Arnaud; Nicolas, Jean-francois
AB A mitochondrial gene encoding restriction endonuclease **I-SceI** of Saccharomyces cerevisiae and a synthetic universal code encoding **I-SceI** for the expression in Escherichia coli and yeast are provided. Applications of **I-SceI** for genetically mapping yeast **chromosomes** by the nested chromosomal fragmentation strategy, inducing double stranded DNA break, and in vivo site-directed insertion of genes and homologous recombination in eukaryotes are also described. It may also be used for prepg. transgenic animal models of human diseases and genetic disorders.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5792632	A	19980811	US 1994-336241	19941107
US 5474896	A	19951212	US 1992-971160	19921105
US 5866361	A	19990202	US 1995-465273	19950605
CA 2203569	AA	19960517	CA 1995-2203569	19951106
WO 9614408	A2	19960517	WO 1995-EP4351	19951106
WO 9614408	A3	19960829		
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 791058	A1	19970827	EP 1995-938418	19951106
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10508478	T2	19980825	JP 1995-515058	19951106
US 5948678	A	19990907	US 1998-119024	19980720

L14 ANSWER 9 OF 82 MEDLINE
AN 95140628 MEDLINE
TI Repair of a specific double-strand break generated within a mammalian **chromosome** by yeast endonuclease **I-SceI**.
SO NUCLEIC ACIDS RESEARCH, (1994 Dec 25) 22 (25) 5649-57.
Journal code: O8L; 0411011. ISSN: 0305-1048.
AU Lukacsovich T; Yang D; Waldman A S

AB We established a mouse Ltk- cell line that contains within its genome a herpes simplex virus thymidine kinase gene (tk) that had been disrupted by the insertion of the recognition sequence for yeast endonuclease **I-SceI**. The artificially introduced 18 bp **I-SceI** recognition sequence was likely a unique sequence in the genome of the mouse cell line. To assess whether an induced double-strand break (DSB) in the genomic tk gene would be repaired preferentially by gene targeting or non-homologous recombination, we electroporated the mouse cell line with endonuclease **I-SceI** alone, one of two different gene targeting constructs alone, or with **I-SceI** in conjunction with each of the two targeting constructs. Each targeting construct was, in principle, capable of correcting the defective genomic tk sequence via homologous recombination. tk+ colonies were recovered following electroporation of cells with **I-SceI** in the presence or absence of a targeting construct. Through the detection of small deletions at the **I-SceI** recognition sequence in the mouse genome, we present evidence that a specific DSB can be introduced into the genome of a living mammalian cell by yeast endonuclease **I-SceI**. We further report that a DSB in the genome of a mouse Ltk- cell is repaired preferentially by non-homologous end-joining rather than by targeted homologous recombination with an exogenous donor sequence. The potential utility of this system is discussed.

L14 ANSWER 11 OF 82 MEDLINE
AN 92123196 MEDLINE
TI Complex recognition site for the group I intron-encoded endonuclease **I-SceII**.
SO MOLECULAR AND CELLULAR BIOLOGY, (1992 Feb) 12 (2) 716-23.
Journal code: NGY; 8109087. ISSN: 0270-7306.
AU Wernette C; Saldanha R; Smith D; Ming D; Perlman P S; Butow R A
AB We have characterized features of the site recognized by a double-stranded DNA endonuclease, **I-SceII**, encoded by intron 4 alpha of the yeast mitochondrial COX1 gene. We determined the effects of 36 point mutations on the cleavage efficiency of natural and synthetic substrates containing the Saccharomyces capensis **I-SceII** site. Most mutations of the 18-bp **I-SceII** recognition site are tolerated by the enzyme, and those mutant sites are cleaved between 42 and 100% as well as the wild-type substrate is. Nine mutants blocked cleavage to less than or equal to 33% of the wild-type, whereas only three point mutations, G-4----C, G-12----T, and G-15----C, block cleavage completely. Competition experiments indicate that these three substrates are not cleaved, at least in part because of a marked reduction in the affinity of the enzyme for those mutant DNAs. About 90% of the DNAs derived from randomization of the nucleotide sequence of the 4-bp staggered **I-SceII** cleavage site are not cleaved by the enzyme. **I-SceII** cleaves cloned DNA derived from human **chromosome** 3 about once every 110 kbp. The **I-SceII** recognition sites in four randomly chosen human DNA clones have 56 to 78% identity with the 18-bp site in yeast mitochondrial DNA; they are cleaved at least 50% as well as the wild-type mitochondrial substrate despite the presence of some substitutions that individually compromise cleavage of the mitochondrial substrate. Analysis of these data suggests that the effect of a given base substitution in **I-SceII** cleavage may depend on the sequence at other positions.

L14 ANSWER 12 OF 82 CAPLUS COPYRIGHT 2002 ACS
AN 2000:553718 CAPLUS
DN 133:160582
TI Gene repair involving homologous recombination induced by in vivo double-stranded cleavage of targeting DNA mediated by chimeric restriction endonuclease
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
IN Choulika, Andre; Mulligan, Richard C.
AB Methods of modifying, repairing, attenuating and inactivating a gene or other chromosomal DNA in a cell through chimeric restriction endonuclease (or meganuclease)-induced homologous recombination are disclosed. 101The method is exemplified by introducing into a cell a vector contg. a targeting DNA homologous to a chromosomal target sites and is flanked by

specific sites for restriction endonuclease **I-SceI** (a Saccharomyces cerevisiae intron-encoded rare-cutter endonuclease recognizing 18-bp sequence) or meganuclease, and cDNA encoding **I-SceI** or meganuclease. The **I-SceI** site is recognized and cleaved in vivo to relase the repair matrix and induce homologous recombination. The method has applications in treating or prophylaxis of a genetic disease in an individual in need.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000046386	A2	20000810	WO 2000-US3014	20000203
	WO 2000046386	A3	20001214		
	W: AU, CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1147209	A2	20011024	EP 2000-908499	20000203
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

L14 ANSWER 16 OF 82 MEDLINE
AN 95198715 MEDLINE
TI Induction of homologous recombination in mammalian **chromosomes** by using the **I-SceI** system of Saccharomyces cerevisiae.
SO MOLECULAR AND CELLULAR BIOLOGY, (1995 Apr) 15 (4) 1968-73.
Journal code: NGY; 8109087. ISSN: 0270-7306.
AU Choulika A; Perrin A; Dujon B; Nicolas J F
AB The mitochondrial intron-encoded endonuclease **I-SceI** of Saccharomyces cerevisiae has an 18-bp recognition sequence and, therefore, has a very low probability of cutting DNA, even within large genomes. We demonstrate that double-strand breaks can be initiated by the **I-SceI** endonuclease at a predetermined location in the mouse genome and that the breaks can be repaired with a donor molecule homologous regions flanking the breaks. This induced homologous recombination is approximately 2 orders of magnitude more frequent than spontaneous homologous recombination and at least 10 times more frequent than random integration near an active promoter. As a consequence of induced homologous recombination, a heterologous novel sequence can be inserted at the site of the break. This recombination can occur at a variety of chromosomal targets in differentiated and multipotential cells. These results demonstrate homologous recombination involving chromosomal DNA by the double-strand break repair mechanism in mammals and show the usefulness of very rare cutter endonucleases, such as **I-SceI**, for designing genome rearrangements.

=> d an ti so au ab pi l16 2 4 5 8

L16 ANSWER 2 OF 25 MEDLINE
AN 95140628 MEDLINE
TI Repair of a specific double-strand break generated within a **mammalian chromosome** by yeast endonuclease **I-SceI**.
SO NUCLEIC ACIDS RESEARCH, (1994 Dec 25) 22 (25) 5649-57.
Journal code: O8L; 0411011. ISSN: 0305-1048.
AU Lukacsovich T; Yang D; Waldman A S
AB We established a mouse Ltk- cell line that contains within its genome a herpes simplex virus thymidine kinase gene (tk) that had been disrupted by the insertion of the recognition sequence for yeast endonuclease **I-SceI**. The artificially introduced 18 bp **I-SceI** recognition sequence was likely a unique sequence in the genome of the mouse cell line. To assess whether an induced double-strand break (DSB) in the genomic tk gene would be repaired preferentially by gene targeting or non-homologous recombination, we electroporated the mouse cell line with endonuclease **I-SceI** alone, one of two different gene targeting constructs alone, or with **I-SceI** in conjunction with each of the two targeting constructs. Each targeting construct was, in principle, capable of correcting the defective genomic tk sequence via homologous recombination. tk+ colonies were recovered following electroporation of cells with **I-SceI** in the presence or absence of a targeting construct. Through

the detection of small deletions at the **I-SceI** recognition sequence in the mouse genome, we present evidence that a specific DSB can be introduced into the genome of a living **mammalian** cell by yeast endonuclease **I-SceI**. We further report that a DSB in the genome of a mouse Ltk- cell is repaired preferentially by non-homologous end-joining rather than by targeted homologous recombination with an exogenous donor sequence. The potential utility of this system is discussed.

L16 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2002 ACS
AN 1995:534146 CAPLUS
DN 123:134052
TI The yeast **I-SceI** meganuclease induces site-directed chromosomal recombination in **mammalian** cells
SO C. R. Acad. Sci., Ser. III (1994), 317(11), 1013-9
CODEN: CRASEV; ISSN: 0764-4469
AU Choulika, Andre; Perrin, Arnaud; Dujon, Bernard; Nicolas, Jean-Francois
AB Double-strand breaks in genomic DNA stimulate recombination. Until now it was not possible to induce in vivo site-directed double-strand breaks in a **mammalian** chromosomal target. In this article the authors describe the use of **I-SceI** meganuclease, a very rare cutter yeast endonuclease, to induce site-directed double-strand breaks mediated recombination. The results demonstrate the potential of the **I-SceI** system for **chromosome** manipulation in **mammalian** cells.

L16 ANSWER 5 OF 25 MEDLINE
AN 95198715 MEDLINE
TI Induction of homologous recombination in **mammalian chromosomes** by using the **I-SceI** system of Saccharomyces cerevisiae.
SO MOLECULAR AND CELLULAR BIOLOGY, (1995 Apr) 15 (4) 1968-73.
Journal code: NGY; 8109087. ISSN: 0270-7306.
AU Choulika A; Perrin A; Dujon B; Nicolas J F
AB The mitochondrial intron-encoded endonuclease **I-SceI** of Saccharomyces cerevisiae has an 18-bp recognition sequence and, therefore, has a very low probability of cutting DNA, even within large genomes. We demonstrate that double-strand breaks can be initiated by the **I-SceI** endonuclease at a predetermined location in the mouse genome and that the breaks can be repaired with a donor molecule homologous regions flanking the breaks. This induced homologous recombination is approximately 2 orders of magnitude more frequent than spontaneous homologous recombination and at least 10 times more frequent than random integration near an active promoter. As a consequence of induced homologous recombination, a heterologous novel sequence can be inserted at the site of the break. This recombination can occur at a variety of chromosomal targets in differentiated and multipotential cells. These results demonstrate homologous recombination involving chromosomal DNA by the double-strand break repair mechanism in **mammals** and show the usefulness of very rare cutter endonucleases, such as **I-SceI**, for designing genome rearrangements.

L16 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2002 ACS
AN 1996:428575 CAPLUS
DN 125:107019
TI Nucleotide sequence encoding yeast enzyme **I-SceI** and its use in inducing homologous recombination in eukaryotic cells and protein production in transgenic animals
SO PCT Int. Appl., 122 pp.
CODEN: PIXXD2
IN Choulika, Andre; Perrin, Arnaud; Dujon, Bernard; Nicolas, Jean-Francois
AB Synthetic DNA encoding the enzyme **I-SceI** is provided. The DNA sequence can be incorporated in cloning and expression vectors, transformed cell lines and transgenic animals. The vectors are useful in gene mapping and site-directed insertion of genes. A synthetic gene encoding Saccharomyces cerevisiae **I-SceI** restriction endonuclease was expressed in Escherichia coli and yeast. The enzyme was used in genetic mapping of a yeast **chromosome**, of YAC's, and of cosmids. **I-SceI** efficiently induced double-stranded breaks in a chromosomal target in **mammalian** cells and the breaks

were repaired using a donor mol. that shares homol. with the regions flanking the break.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9614408	A2	19960517	WO 1995-EP4351	19951106
	WO 9614408	A3	19960829		
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5792632	A	19980811	US 1994-336241	19941107
	EP 791058	A1	19970827	EP 1995-938418	19951106
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 10508478	T2	19980825	JP 1995-515058	19951106

=>

(FILE 'HOME' ENTERED AT 13:09:36 ON 22 APR 2002)

FILE 'MEDLINE, AGRICOLA, CANCERLIT, SCISEARCH, CAPLUS, BIOSIS, MEDICONF'
ENTERED AT 13:09:45 ON 22 APR 2002

```
L1        756977 S CHROMOSOME?
L2           301 S L1 AND (INTRON? (L) ENDONUCLEASE?)
L3           137 DUP REM L2 (164 DUPLICATES REMOVED)
L4           137 FOCUS L3 1-
L5           153 S L1 AND ((GROUP I INTRON?) OR (INTRON ENCODED))
L6            77 S L5 (L) ENDONUCLEASE?
L7            77 S L5 AND ENDONUCLEASE?
L8            37 DUP REM L7 (40 DUPLICATES REMOVED)
L9            37 SORT L8 PY
L10           37 FOCUS L9 1-
L11            2 S L9 AND MAMMAL?

=> d an ti so au ab  l11 1-2
```

L11 ANSWER 1 OF 2 MEDLINE
AN 95198715 MEDLINE
TI Induction of homologous recombination in **mammalian chromosomes** by using the I-SceI system of Saccharomyces cerevisiae.
SO MOLECULAR AND CELLULAR BIOLOGY, (1995 Apr) 15 (4) 1968-73.
Journal code: NGY; 8109087. ISSN: 0270-7306.
AU Choulika A; Perrin A; Dujon B; Nicolas J F
AB The mitochondrial **intron-encoded endonuclease** I-SceI of Saccharomyces cerevisiae has an 18-bp recognition sequence and, therefore, has a very low probability of cutting DNA, even within large genomes. We demonstrate that double-strand breaks can be initiated by the I-SceI **endonuclease** at a predetermined location in the mouse genome and that the breaks can be repaired with a donor molecule homologous regions flanking the breaks. This induced homologous recombination is approximately 2 orders of magnitude more frequent than spontaneous homologous recombination and at least 10 times more frequent than random integration near an active promoter. As a consequence of induced homologous recombination, a heterologous novel sequence can be inserted at the site of the break. This recombination can occur at a variety of chromosomal targets in differentiated and multipotential cells. These results demonstrate homologous recombination involving chromosomal DNA by the double-strand break repair mechanism in **mammals** and show the usefulness of very rare cutter **endonucleases**, such as I-SceI, for designing genome rearrangements.

L11 ANSWER 2 OF 2 CANCERLIT
AN 96605697 CANCERLIT
TI Repair of DNA double strand breaks in **mammalian** cells by homologous recombination and end-joining mechanisms (Meeting abstract).
SO J Cell Biochem, (1995). Suppl. 21A, pp. 328.
ISSN: 0730-2312.
AU Jasin M; Rouet P; Smih F
AB To study the repair of DSBs introduced into **mammalian** chromosomal DNA, we have developed expression vectors for rare-cutting, site-specific **endonucleases** from S cerevisiae. We used the universal code equivalent of the mitochondrial **intron-encoded endonuclease** I-Sce I to build the **mammalian** expression vector, pCMV-I-Sce I. The I-Sce I sequence was provided by B Dujon, Pasteur Institute. In addition to providing a consensus Kozak sequence for efficient translation, the I-Sce I ORF was modified by fusing sequences encoding a nuclear localization signal and a hemagglutinin epitope tag. Our initial assay for in vivo cutting and enhanced recombination measures extrachromosomal recombination, since this form of recombination is very efficient in **mammalian** cells and sensitive to DSBs. The assay utilizes RSVCAT plasmid substrates consisting of overlapping chloramphenicol acetyltransferase (CAT) gene fragments transiently transfected into cells. The RSVCAT plasmids were modified by the insertion of a synthetic I-Sce I site at the end of the homology repeats and cotransfections were carried out in COS 1 cells. We observed a substantial increase of CAT activity in cotransfections of pCMV-I-Sce I

with CAT substrates containing the I-Sce I site but not with plasmids lacking the site. Southern analysis verified in vivo cleavage, as well as recombination. Constitutive expression of the **endonuclease** is not toxic to mouse 3T3 cells. These results have been recently published (Rouet P et al, Proc Natl Acad Sci; 91:6064 1994). We have recently observed efficient cutting of introduced chromosomal I-Sce I sites in 3T3 cells and have found that they are recombinogenic, stimulating gene targeting two to three orders of magnitude. However, they are also repaired efficiently by end-joining mechanisms (Rouet P et al, Mol Cell Biol, in press). Results of these studies were presented. It is expected that expression of rare-cutting **endonucleases** in **mammalian** cells will provide a powerful tool for the analysis of the repair of chromosomal DSBs, as well as for molecular genetic manipulations, such as **chromosome** fragmentation and, potentially, gene-targeting.

=>

(FILE 'HOME' ENTERED AT 13:09:36 ON 22 APR 2002)

FILE 'MEDLINE, AGRICOLA, CANCERLIT, SCISEARCH, CAPLUS, BIOSIS, MEDICONF'
ENTERED AT 13:09:45 ON 22 APR 2002
L1 756977 S CHROMOSOME?
L2 301 S L1 AND (INTRON? (L) ENDONUCLEASE?)
L3 137 DUP REM L2 (164 DUPLICATES REMOVED)
L4 137 FOCUS L3 1-

=> d an ti so au ab pi l4 1, 7

L4 ANSWER 1 OF 137 CAPLUS COPYRIGHT 2002 ACS
AN 1994:318316 CAPLUS
DN 120:318316
TI Thermostable sequence-specific endonucleases of Desulfurococcus and Pyrobaculum, genes encoding them, and their use in gene analysis and manipulation
SO PCT Int. Appl., 73 pp.
CODEN: PIXXD2
IN Dalgaard, Jacob Zeuthen; Garrett, Roger Antony; Kjems, Joergen
AB Thermostable sequence-specific DNA **endonucleases** are encoded by archael type **introns** of stable RNA (rRNA or tRNA) or protein genes or are enzymically active variants thereof in which one or more amino acid residues have been deleted, inserted or substituted by other amino acids. These **endonucleases** recognize relatively long sequences of about 20 base pairs and are very rare cutters, cleaving with a frequency of about 1:5,000,000. Thus, they are useful as **endonuclease** tools for gene anal., such as genome mapping and detection of major rearrangements in large genomes, and for gene manipulation, such as cloning and **chromosome** targeting. Two protein-encoding **introns** were discovered in the 23S rRNA-encoding gene of P. organotrophum. The RNA products circularize after excision from the 23S rRNA and are stable in the cell. The putative proteins encoded by the **introns** contain a common decapeptide sequence which is shared by the putative proteins encoded by both the archael **intron** of D. mobilis and many group I **introns**. The **intron** of D. mobilis was shown to encode an **endonuclease**, the active form of which could be expressed from the linear or cyclized **intron**, but not from the pre-rRNA. **Endonucleases** from P. organotrophum (I-Por I) and from D. mobilis (I-Dom I) were produced with recombinant Escherichia coli and their homing/cleavage sites detd.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9404663	A1	19940303	WO 1993-DK264	19930813

W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

L4 ANSWER 7 OF 137 MEDLINE
AN 90287128 MEDLINE
TI Characterization of I-Ppo, an **intron**-encoded **endonuclease** that mediates homing of a group I **intron** in the ribosomal DNA of Physarum polycephalum.
SO MOLECULAR AND CELLULAR BIOLOGY, (1990 Jul) 10 (7) 3386-96.
Journal code: NGY; 8109087. ISSN: 0270-7306.
AU Muscarella D E; Ellison E L; Ruoff B M; Vogt V M
AB A novel and only recently recognized class of enzymes is composed of the site-specific **endonucleases** encoded by some group I **introns**. We have characterized several aspects of I-Ppo, the **endonuclease** that mediates the mobility of **intron** 3 in the ribosomal DNA of Physarum polycephalum. This **intron** is unique among mobile group I **introns** in that it is located in nuclear DNA. We found that I-Ppo is encoded by an open reading frame in the 5' half of **intron** 3, upstream of the sequences required for self-splicing of group I **introns**. Either of two AUG initiation codons could start this reading frame, one near the beginning of the **intron** and the other in the upstream exon, leading to predicted polypeptides of 138 and 160 amino acid residues. The longer polypeptide was the major form translated in vitro in a reticulocyte extract. From

nuclease assays of proteins synthesized in vitro with partially deleted DNAs, we conclude that both polypeptides possess **endonuclease** activity. We also have expressed I-Ppo in Escherichia coli, using a bacteriophage T7 RNA polymerase expression system. The longer polypeptide also was the predominant form made in this system. It showed enzymatic activity in bacteria in vivo, as demonstrated by the cleavage of a plasmid carrying the target site. Like several other **intron**-encoded **endonucleases**, I-Ppo makes a four-base staggered cut in its ribosomal DNA target sequence, very near the site where **intron** 3 becomes integrated in crosses of **intron** 3-containing and **intron** 3-lacking Physarum strains.

L Number	Hits	Search Text	DB	Time stamp
1	360	(group ADJ I ADJ Intron)or (intron ADJ encoded)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2002/04/22 13:49
8	11	((group ADJ I ADJ Intron)or (intron ADJ encoded)) and (chromosome$2 NEAR mammal$10)	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2002/04/22 13:53
15	17	((group ADJ I ADJ Intron)or (intron ADJ encoded)) and I-sceI$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2002/04/22 13:58
22	10	DUJON-BERNARD	USPAT; US-PGPUB; EPO; JPO; DERWENT; USOCR	2002/04/22 13:58